ORIGINAL ARTICLE

Personal Views about Aging among Korean American Older Adults: The Role of Physical Health, Social Network, and Acculturation

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Abstract Given the importance of a positive attitude towards one's own aging, we examined its predictors in a sample of 230 Korean American older adults (M_{age}= 69.8 years, SD=7.05). Personal views about aging, measured with a subscale of the Philadelphia Geriatric Center Morale Scale (PGCMS), were regressed on demographic variables, physical health-related factors, and psychosocial attributes (social network and acculturation). Results from the hierarchical regression analysis showed that better physical health conditions (fewer chronic conditions, less functional disability, and better vision) were associated with more positive personal views about aging. Other significant contributors included larger social networks and higher levels of acculturation. Findings suggest that personal views about aging among immigrant elderly populations can be enhanced by promoting physical health, social connectedness, and acculturation. Ways to maintain and improve positive attitudes about personal aging are discussed in a cultural context.

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Introduction

Reflecting the dramatic growth of ethnic minority populations in the United States, this study focuses on Korean American older adults. Korean Americans are the fifth largest Asian group in the United States (U.S. Census Bureau 2011). Korean Americans are also one of the fastest-growing ethnic minority groups in the United States, showing a 214 % population growth rate between 1990 and 2010, from 798,846 to 1,706,822 (U.S. Census Bureau 2010). Despite the dramatic increase in their numbers, little is known about this population. Particularly lacking is information about Korean American older adults. The limited literature, however, is consistent in reporting that older Korean Americans have lower physical and mental health status as compared to other racial/ethnic groups. (Hughes 2002; Hurh and Kim 1990; Kiefer et al. 1985; Kim et al. 2010a; Moon 1996). In one of the earliest studies, Kiefer et al. (1985) reported that older Korean Americans had more negative self-concepts and severe psychological symptoms compared with White older adults. More recently Kim et al. (2010a) found that older Korean Americans had the highest rates of probable psychological distress when compared to other Asian American subgroups. These findings suggest a strong need for more research on this population, which can lead to better understanding and enhancement of physical and mental well-being of Korean American older adults.

Focusing on Korean American older adults, the present study addressed personal views about aging, or older individuals' subjective perceptions or attitudes about their own aging (Lawton 1975; Levy et al. 2002b). A number of studies have shown that the physical and mental health of older adults is promoted by having positive views about personal aging (e.g., Jang et al. 2004; Levy et al. 2002a; Moon 1996). Furthermore, some studies report a significant contribution of favorable personal views about aging to longevity. In a study by Maier and Smith (1999), attitudes about personal aging were found to be one of the best predictors of mortality. A more recent study has shown that older individuals with more positive views about personal aging lived 7.5 years longer than those with less positive views about personal aging (Levy et al. 2002b). In studies with Korean populations, the beneficial role of positive personal views about aging on health has also been reported (Jang et al. 2004; Moon 1996).

Given the significance of personal views about aging to both quality and quantity of life and the needs for research on understudied ethnic minority populations, the present study was designed to explore the predictors of personal views about aging among Korean American older adults using the Health Belief Model (HBM; Rosenstock 1960, 1974) as a theoretical framework. The HBM emphasizes the importance of individuals' perception on health behaviors and has already been applied to explain factors associated with self-perception of aging (e.g., Jang et al. 2004). The HBM consists of three components (objective, subjective and behavioral factors) with six major concepts (perceived susceptibility, perceived severity, perceived benefits, perceived costs, motivation, and enabling or modifying factors). As was conceptualized in the previous research of Jang et al. (2004), the present study also focuses on subjective perception of aging and a variety of objective factors such as demographic characteristics, physical health conditions and psychosocial attributes to identify the important contributors to positive personal views about aging. Findings have the potential to help guide social services and programs for various ethnic minority populations including but not limited to older Koreans.

Physical health conditions, such as chronic diseases, functional disability, and sensory performance, may play a substantial influence on older individuals' perceptions and evaluations of personal aging process. Studies have consistently reported the adverse

influences of poor physical and functional health conditions on mental health outcomes (e.g., Idler and Benyamini 1997; Kendig *et al*. 2000; Moon 1996; Zeiss *et al*. 1996). Declines in physical health conditions in later years exert significant influences on many aspects of older individuals' lives, and one of those aspects may include personal views about aging.

Social networks with family and friends may also contribute to positive personal views about aging. A sizable body of literature has evidenced the positive connections between social network and physical and mental well-being among various older populations (e.g., Krause 1997; Sugisawa *et al*. 1994) including older Korean Americans (Moon 1996). It has been suggested that older individuals with a strong connection with family and friends have a high sense of self-worth and self-esteem (Krause 1997). In addition, those individuals who are socially connected may feel more positive about their aging processes and have more favorable attitude about personal aging.

Another potential predictor of personal views about aging in this immigrant population may be level of acculturation. Previous studies have shown that the level of acculturation attained in a host society is a proxy for socioeconomic status and an indication of social adaptation (Jang and Chiriboga 2010; Jang *et al*. 2006; Lee *et al*. 2000). Those who are more acculturated tend to have better physical and mental health compared to less acculturated ones (e.g., Chiriboga *et al*. 2002; Jang *et al.* 2006; Lee *et al.* 2000; Myers and Rodriguez 2002; Zheng and Berry 1991). Older immigrants who are more acculturated to a new culture may have better adjustment to their situations and perceive their own aging processes in a more positive manner.

Based on the above review, the present study examined how demographic characteristics, physical health, social network, and acculturation are associated with personal views about aging among Korean American older adults. We hypothesized that older individuals with better physical health conditions, larger social networks, and higher levels of acculturation would have more a positive personal view about aging.

Methods

Participants

The sample for the present study was drawn from a survey conducted in two cities (Tampa and Orlando) in Florida during the fall of 2003. Fliers introducing the project and inviting participation were distributed to the potential participants of local Korean communities and businesses. In addition, a variety of sources, including Korean senior centers, Korean churches, and other Korean associations, were contacted to recruit potential participants. Participants who were not affiliated with those organizations were recruited by referrals and contacted by the research team via mail. Data were collected through a combined method of face-to-face interviews (53.5 %) conducted in Korean by trained interviewers, and by mail survey (46.5 %). There were no significant differences in major study variables between the face-to-face interview and mail survey groups. Koreans aged more than 60 year-old and with sufficient cognitive ability were eligible to participate in the study. Although instruments for cognitive impairment were not used when screening participants, people who were able to understand the questionnaire and complete the interview or to respond to the instructions provided in the mail survey were considered as having sufficient cognitive ability. Survey interviews were conducted in Korean language by trained interviewers. All respondents were paid $10 for their participation. Detailed information on the study is available elsewhere (Jang *et al*. 2005, 2006).

Measures

All instruments used in this study were translated into Korean, using back translation as and reconciliation a means of checking on content validity. For the majority of measures, validation of the translation and psychometric properties had been conducted by previous studies with Korean older populations (Jang *et al.* 2006). The structured questionnaire was pre-tested with 20 older Korea Americans who were representative of the anticipated participants of this study.

Chronic conditions Chronic conditions were assessed with a list of nine items of chronic diseases and conditions. The list was adopted from the Older Americans Resources and Services Questionnaire (OARS; Fillenbaum 1988). The list includes chronic diseases and conditions commonly found among older adults such as arthritis, stroke, diabetes, and heart problems. The responses were coded as yes (1) and no (0), and summated scores from the list were used with a possible range from 0 to 9.

Functional disability To measure functional disability, we used a composite measure of the Physical Activities of Daily Living (PADL; Fillenbaum 1988), the Instrumental Activities of Daily Living (IADL; Fillenbaum 1988), the Physical Performance Scale (Nagi 1976), and the Functional Health Scale (Rosow and Breslau 1966). The 20-item measure included a wide range of activities such as eating, dressing, managing money, carrying a bag of groceries, and reaching out and above head with arms. Participants were asked to report whether they could perform each activity. The responses were coded as 0 (without help), 1 (with some help), or 2 (unable to do) with a possible range of total scores from 0 (no functional disability) to 40 (severe functional disability). Internal reliability was shown to be relatively high in the present sample ($\alpha=0.89$).

Vision and hearing Sensory performance was measured with self-reports. Participants were asked to rate their status of vision and hearing with help from assistive devices such as glasses, contact lenses, and hearing aids if they were needed. Responses were coded as 1 (excellent), 2 (good), 3 (fair), or 4 (poor).

Social network Social network of relatives and friends were measured with items from the Lubben (1988) Social Network Scale. Six items of social network consisted of the number of relatives or friends seen at least once a month (0 to 9 or more), frequency of contact (less than monthly to daily), and the number of relatives or friends the subject felt close to (0 to 9 or more). Internal consistency was shown to be satisfactory ($\alpha=0.77$).

Acculturation Acculturation was assessed with a measure adopted from the work of Hazuda *et al.* (1988). The six questions are about English proficiency, languages used in conversations with family, preferred languages for media materials (e.g., TV, video, book, and newspaper), food preference, and ethnicity of close friends. The responses were coded from 1 to 5, and total possible scores ranged from 6 to 30 with higher score indicating greater levels of acculturation. Reliability for the six items was shown to be satisfactory ($\alpha=0.86$) in the present sample.

Personal views about aging Personal views about aging were assessed with one of the subscales of the Philadelphia Geriatric Center Morale Scale (PGCMS; Lawton 1975): the 'attitude toward own aging' subscale. The five items include "Things keep getting worse as I get older," "I have as much pep as I had last year," "As you get older, you are less useful,"

"As I get older, things are better than I thought they would be," and "I am as happy now as when I was younger." Each item was answered in a "yes/no" format. To find out whether the five items functioned as a distinct scale, we ran a factor analysis: a single dominant factor solution was yielded. Scores for personal views about aging ranged from 5 to 10, with higher scores indicating more positive personal views about aging. Reliability was low but acceptable (α=0.66).

Demographic variables Demographic information included age (in years), gender (0= male, 1= female), marital status (0= not married, 1= married), educational attainment (0=< high school, 1=≥ high school), and living arrangement (0= living with others, 1= living alone).

Analytic strategy

Pearson product moment correlations among study variables were run to examine the association between variables and to identify potential problems with multicollinearity. A hierarchical regression analysis was conducted to assess the predictive model of personal views about aging. Following the conceptual model mentioned in the introduction section and findings from previous empirical studies, sets of predictors were entered in the following hierarchical order: (1) demographic variables (age, gender, marital status, education, and living arrangement), (2) physical health-related factors (chronic conditions, functional disability, vision, and hearing), and (3) psychosocial attributes (social network and acculturation).

Results

Descriptive characteristics of the sample and study variables

Descriptive characteristics of the sample and study variables are presented in Table 1. The sample consisted of 230 Korean American older adults aged 60 to 92, with an average age of 69.8 years (SD=7.05). More than half (59.1 %) were female, and about three quarters (73 %) were married. Compared with other older immigrant populations (Kim *et al.* 2010b; 2011) and with other samples of older Korean Americans (Kim *et al.* 2010a), it was a relatively well-educated group, with over half (57.8 %) of the sample having received more than a high school education. Thirteen percent of the sample was living alone. Older Korean Americans averaged about one chronic health condition (SD=1.11) and reported relatively low functional disability. These latter results are similar to previous research, which also reports advantages in physical health for Korean Americans compared with other Asian subgroups, especially Filipinos and Vietnamese (e.g., Kim *et al.* 2010a).

Correlations among study variables

Table 2 shows bivariate correlation coefficients among study variables. Individuals who had a more positive personal view about aging were likely to be younger, married, more educated, and healthier (e.g., fewer chronic conditions, less functional disability, better vision and hearing). More positive views about personal aging were also observed among individuals with larger social networks and higher levels of acculturation. Better functional status was associated with larger social networks and higher levels of acculturation, and acculturation and social network were positively connected each other. Given that the

Table 1 Descriptive Characteristics of the Sample and Study Variables ($n=230$)

Variable	%	Mean/SD	Range	Reliability
Age		69.8/7.05	60–92	
Gender (female)	59.1			
Marital status (married)	73.0			
Education (≥high school)	57.8			
Living arrangement (living alone)	13.0			
Chronic conditions		1.36/1.11	0–5	
Functional disability		1.69/3.52	0–21	0.89
Vision		2.59/0.82	1–4	
Hearing		2.16/0.87	1–4	
Social network		18.27/5.86	6–35	0.77
Acculturation		11.47/4.45	6–25	0.86
Personal views about aging		7.67/1.58	5–10	0.66

highest correlation coefficient between independent variables was −0.53, the existence of multicollinearity was unlikely in the present study.

Regression model of personal views about aging

To determine the predictability of physical health-related factors and psychosocial attributes (social network and acculturation) on personal views about aging, a hierarchical regression was tested and is presented in Table 3. In model 1, demographic variables (age, gender, marital status, education, and living arrangement) explained 10 % of the variance. Higher education was found to contribute significantly to a more positive personal view about aging. The entry of physical health-related factors in model 2 added 13 % of explained variance, with fewer chronic conditions, less functional disability, and better vision being the important predictors of positive personal views about aging. The third and final model introduced psychosocial attributes (social network and acculturation); it contributed an additional 8 % of the variance, resulting in a total explained variance of 31 %. Individuals with larger social network and higher levels of acculturation were found to have more positive personal views about aging.

Discussion

Given the reported significance of positive personal views about aging to both quality and quantity of life (Levy *et al.* 2002a,b; Maier and Smith 1999), the present study explored its predictors using a sample of 230 Korean American older adults. The predictability of demographic variables, physical health-related factors, and psychosocial attributes (social network and acculturation) to personal views about aging was assessed. Findings from our analyses provided supporting evidence for the proposed hypothesis.

In the hierarchical regression model, better health conditions indicated by fewer chronic conditions, less functional disability, and better vision were significantly associated with more positive personal views about aging. This finding is consistent with previous studies showing the close connections of poorer physical health with negative psychosocial and

Table 2 Correlations among Study Variables ($n=230$)

	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	–											
2. Gender	0.01	–										
3. Marital status	-0.25***	-0.37***	–									
4. Education	-0.25***	-0.32***	0.26***	–								
5. Living arrangement	-0.01	0.08	-0.53***	-0.09	–							
6. Chronic conditions	0.13*	0.19**	-0.17**	-0.07	0.01	–						
7. Functional disability	0.33***	0.09	-0.27***	-0.15*	0.02	0.28***	–					
8. Vision	0.14*	0.15*	-0.19**	-0.09	0.06	0.29***	0.20**	–				
9. Hearing	0.34***	0.08	-0.24***	-0.10	0.03	0.18**	0.38***	0.43***	–			
10. Social network	-0.18**	0.10	0.06	0.17*	0.00	0.02	-0.18**	-0.05	-0.07	–		
11. Acculturation	-0.35***	-0.14*	0.25***	0.43***	-0.06	-0.07	-0.23**	-0.21**	-0.16*	0.17*	–	
12. Personal views about aging	-0.19**	-0.05	0.22**	0.19**	-0.09	-0.30***	-0.32***	-0.37***	-0.25***	0.28***	0.28***	–

$*$ $p<0.05$, $**$ $p<0.01$, $***$ $p<0.001$

Table 3 Regression Model of Personal Views about Aging (*n*=230)

Predictors	Model 1		Model 2		Model 3	
	β	t	β	t	β	t
Age	−0.11	−1.43	−0.01	−0.11	0.05	0.71
Gender	0.03	0.44	0.09	1.18	0.05	0.64
Marital status	0.15	1.62	0.09	0.97	0.05	0.58
Education	0.19	2.50*	0.19	2.67**	0.09	1.16
Living arrangement	0.00	0.03	−0.01	−0.20	−0.03	−0.49
Chronic conditions			−0.16	−2.19*	−0.19	−2.72**
Functional disability			−0.18	−2.46*	−0.14	−1.93
Vision			−0.20	−2.73**	−0.15	−2.17*
Hearing			−0.02	−0.35	−0.04	−0.53
Social network					0.25	3.75***
Acculturation					0.16	2.04*
ΔR²	0.10**		0.13***		0.08***	
R²	0.10**		0.23***		0.31***	

* *p*<0.05, ** *p*<0.01, *** *p*<0.001

mental outcomes (Borawski *et al*. 1996; Idler and Benyamini 1997). Having health problems, restricted functionality, and sensory impairment may not only exert physical inconvenience and limitations but also lead to negative self-concepts and adverse evaluations of one's own aging processes or situations. This finding suggests that across diverse cultures the personal views about aging of elders can be enhanced by prevention of disease and disability, health promotion, and a proper use of assistive sensory devices.

Social network was shown to have a positive effect on personal views about aging even after controlling for the effects of demographic variables and physical health factors. The effect of social network on well-being is consistent with studies showing that individuals with social resources have a more favorable perception of themselves and their situations (e.g., Krause 1997). It seems that social connectedness with family members and friends is a major source of support for the immigrant older adults and it helps them have positive emotional outcomes including favorable personal views about aging.

Given the unique characteristics of the sample as an immigrant population, special attention was paid to the contribution of acculturation. Most research on acculturation tends to conceptualize it as a potential source of stress, so called 'acculturative stress,' and examine its connections with physical and mental consequences (e.g., Chiriboga *et al.* 2002). The present study took a unique approach by conceptualizing acculturation as a potential predictor of personal views about aging. Our results in general support the hypothesis that older individual who are highly acculturated have more positive personal views about aging. What was especially unique about our findings was that for older Korean Americans acculturation had a positive effect on positive views of aging, even after controlling for demographic characteristics and physical health conditions. Consistent with previous research on Korean self-perception of aging (Jang *et al.* 2004), this also demonstrates the importance of social and cultural factors on positive attitudes toward aging among older Korean Americans. It may be that individuals who are more acculturated have fewer limitations in their everyday lives due to their language skills and familiarity to a new culture. In turn, they

may enjoy a sense of independence and personal achievement, which lead to positive views about personal aging.

This study is not without limitations. It should be noted that the generalizability of the present study is limited due to its reliance on a sample of convenience and its cross-sectional nature. Another limitation is that formal tests of cognition were not used to screen potential research participants. Such tests are often threatening to older adults and for this reason we relied on trained interviewers to detect signs of confusion, and on the ability to follow directions on mailed surveys. Additionally, given the cross-sectional nature of this study, the identified significant association between predictors and attitude toward aging do not specifically imply causation. Further examination with longitudinal approach would be helpful to identify a causal relation. Lastly, given that older Korean Americans tend to have poorer mental health conditions compared to other ethnic groups (e.g., Kim *et al*. 2010a) and that the present study did not statistically control for mental health status, their mental health status such as depressive symptoms might have affected their responses to the attitude toward own aging subscale. Future research should test the possibility of the measurement bias in the attitude toward aging scale.

Despite the limitations, findings from the present study suggest that positive personal views about aging among immigrant elderly can enhanced by promoting physical health conditions, social connectedness, and acculturation. Difficulties with living in a new culture and various changes accompanied with aging may make older immigrants more vulnerable to negative physical and mental outcomes. By reinforcing positive perceptions of and attitudes about aging, maintenance or promotion of physical and mental well-being of older immigrant populations can be achieved. Future studies need to include more diverse ethnic groups, and use of longitudinal study design and representative sample are strongly recommended.

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